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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,025	07/16/2009	Iraj Farhoudi	JRL/2380-1438	9241

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EXAMINER	
SHEN, QUN	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,025	FARHOUDI ET AL.	
	Examiner	Art Unit	
	QUN SHEN	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 February 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/24/07,5/29/09,12/8/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This communication is a First Action non Final on the merits. Claims 1-23, after preliminary amendment, are currently pending and have been considered below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-9, 11-20, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2003/0153343 A1, Crockett et al. (hereinafter Crockett).

As to claim 1, Crockett discloses a method of performing data communication between a sending user communications unit and multiple receiving user communications units in a cellular communications system (Fig 1), comprising the steps of:

said sending user communications unit providing data to be communicated to said multiple receiving user communications units over said communications system (Fig 1: 120, a sending communication device (e.g. sending user communications unit), performs push to talk over cellular communication network (Fig 1: 126 a cellular base station, 128, ATM network) to multiple communication devices or mobile stations (Fig 4, MS1 - MSn), pars 0010, 0012);

identifying a set of at least two of said multiple receiving user communications units being associated with a same cell of said communications system (Fig 1, Fig 4: 402 selects member lists MS1 ...MSn within regional MCU - local call (i.e. in the same cell in a cellular network), pars 0010, 0012-0013); and

simultaneously transmitting said data to said identified receiving user communications units of said set using a dedicated channel specific for said cell (Fig 4:, data, including announcement 414 and media 420, is transmitted simultaneously to a group of mobile stations associated with the group call, the group members being identified with the associated base station under control of regional and home location server).

As to claim 2, Crockett discloses the method according to claim 1, wherein said transmitting step comprises simultaneously point-to-multipoint communicating said data using said dedicated channel (Fig 16, par 0186, Media traffic on the media traffic channel 1614 may comprise real-time point-to-multipoint voice and/or data broadcasts).

As to claim 3, Crockett discloses the method according to claim 1, wherein said communications system comprises a communications server managing said data communication (Fig 1, pars 0010, 0012-0013), said method further comprising, for a user communications unit, the steps of:

generating, in said communications server, session data identifying a communications session, in which said user communications unit is participating (pars 0036-0037, 0074,

0105, , initiates, generates and utilizes packet data session per cdma 2000 standard, internet IP session, such as SIP, etc. with the call group involved through servers); and providing, to said communications server, cell information identifying a cell with which said user communications unit presently is associated (Figs 1,3, pars 0037, 0050-0056 (information updates and exchanges in regional and home location servers), 0180-0181, the group call is over the cellular infrastructure, going through call registration with the cellular network; therefore, such cell information and associated mobile station information being known and provided to the server is implied if not inherent).

As to claim 4, Crockett discloses the method according to claim 3, wherein said identifying step comprises identifying said set of receiving user communications units based on said session data and said cell information (pars 0047, 0077, 0093-94, call instance identifier, 0100, 0104, identifying the base station serving the participated mobile stations).

As to claim 5, Crockett discloses the method according to claim 4, wherein said identifying step comprises the steps of:
said communications server comparing, for a given session data, said cell information associated with said multiple receiving user communications units with a cell identifier of said cell (pars 0047, 0077, 0104, 207, during mobile station registration, identification of base station serving the mobile stations being used for establishing communication sessions (setup paging and access channels), call group information, including

geographical location of the call group members (IP address, location being served by the cell etc) is stored in the group database in the server; therefore, such comparison is implied or inherent); identifying said set of receiving user communications units based on said comparison (par 0047, 0067-0068, 0077, 0104, 207).

As to claim 6, Crockett discloses the method according to claim 3, further comprising, for a user communications unit, the steps of:
providing address information associated with said user communications unit to said communications server (pars 0036-0037, group communication devices register IP address with application server and notify the server location information including IP address); and
associatively storing said address information, said session data and said cell information associated with said user communications unit in a database associated with said communications server (pars 0061, 0068, 0077, 0179).

As to claim 7, Crockett discloses the method according to claim 3, further comprising said user communications units providing said cell information to said communications server during a communications session set up procedure (pars 0035, during user registration and call setup process, also pars 0052, 0059, 0061, 0064, user location information being associated with cell or base station of the cellular infrastructure).

As to claim 8, Crockett discloses the method according to claim 1, further comprising

providing a notification identifying said dedicated channel to said receiving user communications units of said set (pars 0010, 0012-0013, alerting the user to provide media, and buffering the media for transmission after a traffic channel is reestablished, Fig 16, pars 0186, media signaling channel 1612 setup and control media channel 1614).

As to claim 9, Crockett discloses the method according to claim 1, further comprising point-to-point transmission of said data to receiving user communications units not belonging to said set using a single channel for each user communications unit (par 0074, a point-to-point protocol would be established as the client moving out of the region (roaming) – no longer in the same region the client being located, i.e. (out of local call group or same cell).

As to claim 11, Crockett discloses the method according to claim 1, wherein said dedicated channel is a multimedia receiver channel (MMRC) (Fig 16: 1614, a media traffic channel, par 0184).

As to claim 12, Crockett discloses the method according to claim 1, wherein said data communication is push to talk over cellular (PoC) communication (Figs 1, 4, pars 0013, 0034, 0119).

As to claim 13, claim 13 recites a communication server that encompasses and

necessitates method claim 1. Rejection of claim 1 is therefore incorporated herein (see discussion and rejection in claim 1 above).

As to claims 14-18, they are rejected with the same reason set forth in claims 8-9, and 11, respectively.

As to claims 19-20, and 22, they are rejected with the same reason set forth in claims 2-6, respectively.

As to claim 23, claim 23 is a system claim comprising a communication server and communication units. It is rejected with the same reason set forth in claims 1 and 13.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

> The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: ***(See MPEP Ch. 2141)***

> Determining the scope and contents of the prior art;
> Ascertaining the differences between the prior art and the claims in issue;
> Resolving the level of ordinary skill in the pertinent art; and

Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crockett, **in view of US 2004/0203451 A1, Braun et al. (hereinafter Braun).**

As to claim 10, Crockett discloses the method according to claim 1, but does not expressly disclose providing, for each receiving user communications units of said set, radio link quality information; determining a lowest link quality based on said provided link quality information; and using said lowest link quality for selecting coding scheme for all receiving user communications units of said set. Braun, in the same or similar field of endeavor, teaches measuring the radio link quality between wireless terminal and network component (Braun: par) and determining the coding and modulation scheme based on the radio link quality (Braun: Fig 2, pars 0027-0028) and such coding selection may be based on certain pre-determined signal quality threshold (Braun: pars 0012-0013), such as lowest signal quality (Braun: par 0045). Therefore, consider Crockett and Braun's teachings as a whole, it would have been obvious to one of skill in the art in the time of invention to adopt Braun's teachings on selecting coding schemes based on signal quality level (either certain selected threshold, i.e. lowest signal quality level) in Crockett's push to talk over the cellular application to assure effective communication being carried out among the talk group with adequate transmission power and appropriate coding and modulation scheme. Note that, dynamically selecting modulation and coding scheme based on radio link quality among the

communication transceivers have been well known techniques in the wireless communication art.

3. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crockett, in view of US 2006/0034202 A1, Kuure et al. (hereinafter Kuure).

As to claim 21, Crockett discloses the server according to claim 13, further comprising a push to talk over cellular (PoC) server comprising said identifying means (see discussion in claims 12 and 13) but does not and a multimedia broadcasting multicasting service (MBMS) server comprising said transmitting means. Kuure, however, teaches MBMS server in a cellular system, which is able to broadcast or multicast information to multiple participants over a geographical area for a push to talk over cellular application (Kuure: pars 0010 – 0011, 0030). Therefore, consider both Crockett and Kuure's teachings as a whole, it would have been obvious to one of skill in the art at the time of invention to incorporate Kuure's teachings about multimedia broadcast multicast service into Crockett's push to talk over the cellular system and method to include more capability and technology/standard in push to talk applications.

As to claim 22, Crockett as modified discloses the server according to claim 21, wherein said MBMS server is configured for simultaneously transmitting said data using a multimedia receiver channel (MMRC) (pars 0014-0016, 0024-0025, note MBMS

broadcasts data over the broadcasting channels to multiple receivers at the same time).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUN SHEN whose telephone number is (571)270-7927. The examiner can normally be reached on 9:30 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jinsong Hu can be reached on 571-272-3965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/QUN SHEN/
Examiner, Art Unit 2617

/Jinsong Hu/

Supervisory Patent Examiner, Art Unit 2617